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Applicants:	Jian Qin et al.	Docket	15105.1	<b>DEC 11 2006</b>
Serial No.:	10/810,977	T.C./A.U.:	3761	
Confirmation	9633	Examiner:	Stephens, Jacqueline F.	
Filed:	March 25, 2004	Date:	December 11, 2006	
For:	<b>PERMANENTLY WETTABLE SUPERABSORBENTS</b>			

**DECLARATION OF JIAN QIN  
UNDER 37 CFR §1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

I, Jian Qin, of 3316 South Scarlet Oak Lane, Appleton, Wisconsin 54915 declare as follows:

1. I am employed by Kimberly-Clark Corporation, and am one of the inventors named on the above-identified patent application, which is assigned to Kimberly-Clark Worldwide, Inc.

2. I am a Research Technical Leader employed by Kimberly-Clark Corporation, and I have held this position for eight years. In the course of my work at Kimberly-Clark, I have on a large number of occasions carried out and/or supervised the testing of the physical properties of absorbent compositions, absorbent composites and absorbent articles using pre-defined test procedures. In particular, I have often repeated test procedures defined in patents and patent applications in order to test the properties of samples of such materials.

3. I prepared and tested one (1) example based on U.S. Patent No. 3,989,596 to Bashaw et al. utilizing powdered maleic anhydride-isobutylene copolymer, commercially available from Kuraray America, Inc., under the trade designation of ISOBAM-18, to demonstrate the differences between a pulverized

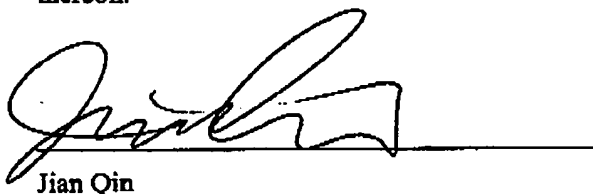
Serial No. 10/810,977

Docket No.: 15105.1

superabsorbent polymer made by a conventional production process having a fugitive surfactant coating, and a superabsorbent material made by a spinning process having a permanent surfactant coating. The example of pulverized superabsorbent polymer was coated with an aqueous 2 wt% solution (98 wt% water) of lauryl dimethylamine oxide surfactant. The example was dried and then tested for floating time and 0.9% NaCl saline surface tension. The example exhibited a floating time of 10.3 seconds and a reduction in saline surface tension of 47.5%. Thus, the example based on Bashaw et al. demonstrates that the polymer, with or without surfactant, is hydrophilic (i.e., a floating time of less than 30%) and the surfactant coating is fugitive rather than permanent (i.e., the reduction in saline surface tension is greater than 30%). The example preparation and testing information and data are contained in Attachment 1.

4. Because of my unfamiliarity with the legal issues involved, the attorney of record has assisted in the drafting of this Declaration.

5. I hereby declare that all statements made herein based on my own knowledge are true, and that all statements made on information and belief are believed to be true. These statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Jian Qin

Date: Dec. 11, 2006

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## Attachment 1

**Preparation and testing of Example based on U.S. Patent No. 3,989,596 to Bashaw et al.\* :**

**Example A:**

3 grams of powdered maleic anhydride-isobutylene copolymer, commercially available from Kuraray America, Inc., under the trade designation of ISOBAM-18, having a molecular weight of about 160,000 to about 170,000 and containing 4% diethylenetriamine as a crosslinker, was dispersed in 200 milliliters of an aqueous 2 wt% solution of lauryl dimethylamine oxide, available from Rhone Poulenc, Inc. The resulting dispersion was then added to a solution containing 0.6 gram of ammonium hydroxide and 2000 milliliters of water. The resulting slurry was dried in a hot oven at 270° F and remained in particulate form after being completely dried.

**Reproduced Sample and Properties:**

The powder from Example 1 was subjected to two key tests: (1) Floating Test, and (2) Surface Tension Test. The tests were conducted in accordance with the present disclosure. The results are listed in Table 1 below:

**Table 1**

<b>Superabsorbent Powder</b>	<b>Floating Test (seconds)</b>	<b>Surface Tension (dyne/cm)</b>	<b>Change in Surface Tension (%)</b>
<b>Example A</b>	<b>10.3</b>	<b>37.8</b>	<b>47.5</b>

1. The copolymer was neutralized by ammonium hydroxide, rather than ammonia gas, since a pressure container was not available.
2. No Kraft paper pulp was added into the reproduced sample since the purpose was to compare the superabsorbent polymers only. The presence of the pulp would make the results unexplainable. Therefore, the reproduced sample was not in sheet form, as described in Bashaw.
3. The example of Bashaw used an anionic surfactant (sodium lauryl sulfate). However, this surfactant cannot form permanent bonds with the copolymer due to the lack of reactive functional groups. For comparison purposes, the cationic-nonionic surfactant (lauryl dimethylamine oxide) of the present disclosure was used to produce the sample.
4. Due to the large amount of sample needed for the Surface Tension test, Bashaw's recipe was multiplied by a factor of 10.